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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,144	08/30/2001	Bertram Eichel	20453/2	8651

7590 09/15/2003

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EXAMINER

WALLS, DIONNE A

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/943,144	<b>Applicant(s)</b> EICHEL, BERTRAM	
	<b>Examiner</b> Dionne A. Walls	<b>Art Unit</b> 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 7-48 is/are pending in the application.
- 4a) Of the above claim(s) 26-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7-25 and 43-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2,5,7-25 and 43-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schreus et al (US. Pat. No. 2,815,760) in view of Eichel (US. Pat. No. 3,459,194).

Schreus et al discloses all that is recited in the claims (see col. 1, lines 51-62; col. 2, lines 23-32; col. 4, lines 31-33 and 69-72; see example 2 and figs) except it may not disclose using a strongly basic anion exchange resin that is in bicarbonate form; or a filter that further comprises methyl cellulose or moisture; or a filter having a ratio of filter material to tobacco material in the range of from 1:2 to 1:10. However, Eichel discloses a tobacco product incorporating a filter, containing ion exchange resin, designed to inhibit the adverse effects of tobacco smoke, said filter including the above-claimed components (see col. 2, lines 47-50, col. 4, lines 2-24; and col. 11, line 73). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate these components into the filter of Schreus et al since both filter are aimed at reducing the health-affecting volatile substances contained in tobacco smoke by using ion exchange materials.

Further, regarding claims 10-14, while Schreus et al may not specifically recite the claimed threading arrangement of the filter cartridge, it does state that the filter cartridge is designed so that it fits tightly into a hollow chamber of a holder, pipe, etc. (see col. 5, lines 25-26). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide male-threading for use with female channel threading to secure the cartridge, tightly, into a channel of a pipe or holder since threaded arrangements are conventional in many arts and would merely serve to ensure that the cartridge remains immobile during use, but is easily replaced when necessary.

Lastly, regarding claims 15, 19-20, and 43-45 and 48, the filter of Schreus modified by Eichel would be capable of the intended use recited in the claims.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schreus (US. Pat. No. 2,815,760) in view of Bavley et al (US. Pat. No. 3,280,823).

While Schreus may not specifically state that the strongly acidic cation exchange resin is selected from the group consisting of Dowex 50 and Dowex 50-W, Bavley et al discloses a filter employing strong cation-type resins, and discloses that Dowex 50-W is a known resin of such type and is suitable for use as an ion-exchange in its filter (see col. 3-4). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate Dowex 50, to be used as a strongly acidic cation exchange resin in the filter of Schreus, since such resin is known and used for the purpose of filtering harmful tobacco smoke constituents – as evidenced by the disclosure of Bavley et al.

***Response to Arguments***

4. Applicant's arguments filed July 7<sup>th</sup>, 2003 have been fully considered but they are not persuasive.

- Applicant argues that the cited references do not contain a "mixture" of "a strongly acidic cation exchange resin" and "a strongly basic anion exchange resin in bicarbonate form" in the presence of "moisture", since the presence of "moisture" is not found in the art. The Examiner, however, disagrees. First, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that a feature upon which Applicant relies (i.e., a "mixture" of the four elements) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, the Examiner asserts that the presence of "moisture" is found in the prior art of record, namely the Eichel reference which discloses, in Example 6, that a strongly basic anion exchange resin in bicarbonate form is prepared by passing a bicarbonate solution comprising sodium bicarbonate in distilled water through an Amberlite IRA-401 resin bed. Since this appears to almost mirror the manner in which a strongly basic anion exchange resin in bicarbonate form is prepared in the instant specification, the applicable limitations in the claim appear to be met by the teaching in this reference.

- Applicant argues that Schreus discloses no teachings or suggestions as to the means to secure the filter in place, and there is no motivation to arrive at Applicant's claimed threading means. The Examiner disagrees and believes that the claimed

threading arrangement, as stated in the above rejections, is a conventional one use in many arts. Such arrangement is, therefore, not patentably distinguishable over the prior art.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

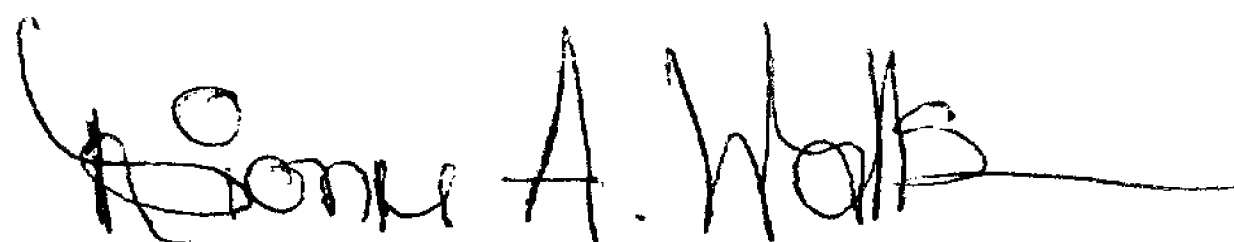
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

A handwritten signature in black ink, appearing to read "Dionne A. Walls". The signature is stylized with a large, looped initial "D" and a long horizontal stroke at the end.

Dionne A. Walls  
September 11, 2003